

## INVASIVE SPECIES CONTROL PROJECTS (R1 SMALL GRANTS) CY 2014 FINAL REPORT

Project Title: Control and Eradication of Saltcedar

Station: Mid-Columbia River NWR Complex (Hanford Reach NM, McNary NWR)

Contact Person: Kevin Goldie

Project Description: The project as described was to remove all saltcedar (*Tamarix* spp.) from selected areas of McNary and Columbia Refuges and the Hanford Reach National Monument, and to control saltcedar on additional selected areas on the Monument. Saltcedar is a non-native shrubby tree that can significantly degrade native habitats and/or prevent native vegetation from establishing or recolonizing following a disturbance. It has little to no forage value, can significantly alter hydrology and soil pH, and often forms near monocultures with little to no native understory. Plants will be treated through cut stump and a 50% solution of triclopyr (plus adjuvants).

Invasive Species Targeted: Saltcedar (*Tamarix* spp.), Russian olive (*Elaeagnus angustifolia*)

Project Completion Date or Estimated Completion Date: 03-Oct-2014

Project Results: Multiple issues cropped up that led to a significant redesign of the project. The Complex was tasked with unexpected commitments under the Sikes Act (i.e., weed treatment on Mountain Home and Fairchild Air Force Bases), limiting the time we had available to devote to on-the-ground treatment. Bureaucratic difficulties in the hiring process led to significant delays in fully staffing the Complex's Invasives Strike Team. After final processing of GPS files of mapped infestations and areas treated in 2013 it was discovered that several of the patches on the Monument were significantly larger than had been thought and had spread into inaccessible and unstable areas. And to top it off the biologist familiar with the Columbia infestations was not available to assist in the field this year. All of this led to a redesign of the project and reprioritization of target areas.

None of the Columbia, McNary or Saddle Mountain infestations were treated: Columbia due to lack of institutional knowledge; McNary and Saddle Mountain Refuges due to time constraints and lack of available personnel. The infestations in the Ringold Unit and on the White Bluffs were found to be larger than previously thought (more than 40 acres, up from the original 10 acres), and had expanded into unstable slumping areas (i.e., areas not safe to access on foot). The decision was made to aerially treat these instead of attempting to cut stump treat them. A contract was awarded to Lohman Helicopter, LLC of Kendrick, ID for this work. However, a required NPDES permit was not received until after the effective treatment period so this work had to be postponed until early summer 2015. As they were available, members of the Complex's Strike Team were tasked with revisiting past treatment areas and spot treating saltcedar and Russian olive (another significantly invasive tree that grows in similar conditions as saltcedar), primarily around the WB10 Ponds and other areas of the Wahluke and Ringold Units. From mid-August through early October Team members applied Aquasweep (triclopyr

amine + 2,4-D amine; EPA Reg # 228-316) in a 1.5% solution, with label rates of Liberate surfactant, to all encountered saltcedar and Russian olive sprouts. In all they treated approximately 266 acres of sprouts within the larger project area.

Number of Acres Treated: 266 acres

Number of Acres Inventoried and/or Mapped: ~40.58 acres w/in 534 acres

Number of Acres Restored: unk

Total Grant Amount: \$31,000

Breakdown of Expenditures\*:

<b>Category</b>	<b>Total \$ Spent</b>	<b>% of Total Grant</b>
Equipment/Supplies	\$853	2.7%
Chemical	\$1,830	5.9%
Biocontrol Agents	---	---
Travel	\$1,200	3.9%
Biotech/Contractor Salary	\$8,020	25.9%
Restoration Materials	---	---
Other (Aerial Spray Contract)	\$19,097	61.6%
<b>TOTAL</b>	<b>\$31,000</b>	<b>100%</b>

*\* estimated*